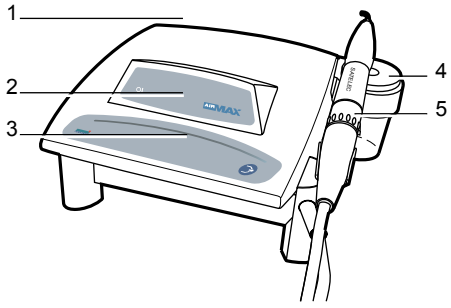
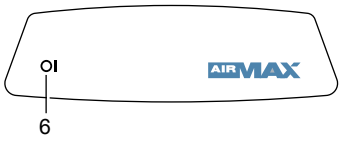
# Air Max

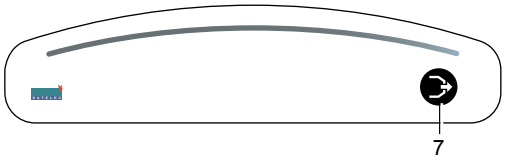
User's manual • Notice d'utilisation • Manual de uso
Benutzerhandbuch • Manuale d'uso • Handleiding voor de gebruiker

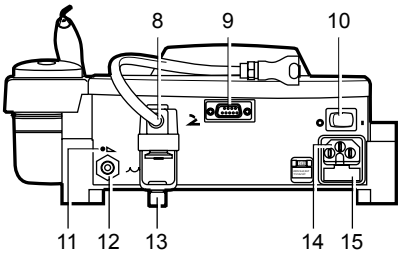
SATELEC

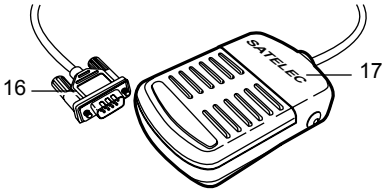
## Illustrations

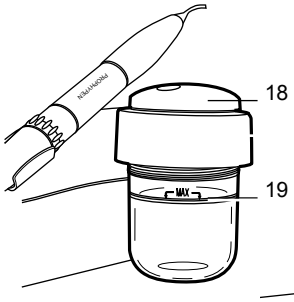


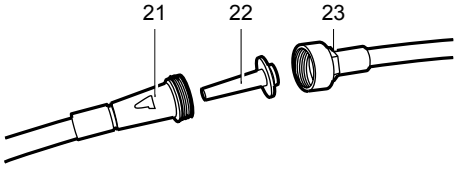



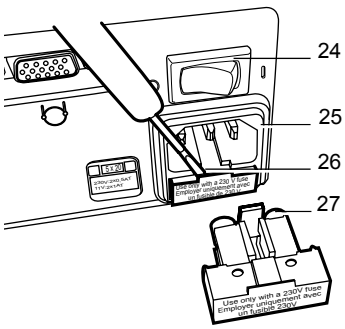





# 1. Introduction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The Air Max® is an air-polisher. It enables treatment to be carried out in optimal aseptic conditions.

Air Max® is equipped with a ProphyPen handpiece.

## General characteristics

- Polishing function via the powder drum.
- Irrigation via the water supply with flow regulation on the handpiece connector.
- Foot control, via a pedal.
- Integrated heating system for the spray for optimal patient comfort.

The Air Max is a prophylactic device for polishing after scaling, or in periodontal and implant maintenance.

## Parts included

- One Air Max device
- One mains cord
- One single pedal foot control
- ProphyPen® handpiece with titanium nozzle
- Powder Max introductory powder kit
- Pack three plastic nozzles

## General view

Refer to relevant figure on the fold-out part of the cover.

1. *Rear panel*
2. *Front panel - Display*
3. *Sensitive control panel*
4. *Powder drum*
5. *ProphyPen handpiece*

## Front panel – Display

### 6. On/off button (O/I)

Lights up when the on/off button (ref. 10) is in I position.

## Sensitive control panel

### 7. Purge key

A short press purges the handpiece powder circuit for a predetermined length of time of a few seconds.

## Rear panel

### 8. Compressed air supply filter

Before use the compressed air first passes through a filter (ref. 8) with a purge button (ref. 13). A rapid disconnection system with an automatic valve enables it to be connected to the mains.

### 9. Foot control connector

Connection for the foot control pedal.

### 10. On/off button (O/I)

### 11. Air pressure adjustment

Air pressure is preset in the factory. For any adjustment of the pressure, contact an approved installer of dental equipment.

### 12. Drinking water supply connector

Its rapid disconnection system with an automatic valve enables it to be connected to the supply. A removable filter is located on the water inlet pipe.

**13. Purge of compressed air filter**

Press this purge button to eliminate air remaining in the filter.

**14. Power socket**

Connection to mains electricity is by a standard connector conforming to IEC 60-320.

**15. Fuse housing**

Contains the device's fuses.

# 2. Installation

## Recommendations

For your safety, connections (water, air and electricity) should be carried out by an approved installer of dental equipment. The device requires the following connections (see technical specifications chapter):

Carry out the connection to the drinking water supply using an automatic cutoff valve of the *Aquastop* type, or to the dental chair water supply.

**Caution:** always turn off the water supply when you leave the dental practice.

## Setting up the equipment

- Position the device in the place where it is going to be used.
- Connect the foot control (ref. 16) to the connector on the device (ref. 9).
- Connect the water supply pipe with its filter to the connector located at the rear of the device (ref. 12).
- Connect the air supply pipe to the air filter located at the rear of the device (ref. 8).
- Plug in the power socket (ref. 14).
- Open the supply taps (water-air).

# 3. Starting and stopping the device

This device should only be used by professionals (dental practitioners and hygienists). Before being used for the first time it is:

- imperative to clean, disinfect using alcohol or disinfectant dental wipes and/or sterilize the accessories (casing of the device, handpiece, tips, keys, etc.);
- recommended that the accessories be plugged in and the spray operated for a few minutes to rinse the device's internal water circuits.

**Important:** It is imperative that the water supply is turned off when leaving the dental practice.

## Switching on the power

**Set the power switch to the on position (I) (ref. 10).**

## To operate

**Press the foot control pedal (ref. 17).**

## Switching off the device

**Set the on/off switch to the 0 position (ref. 10).**

# 4. Using polishing mode

## Filling the powder drum

Proceed as follows:

1. **Put the device into standby mode to depressurize the drum.**
2. **Unscrew the cap (ref. 18).**
3. **Fill the drum with Satelec® PowderMax powder up to the level marker (ref. 19).**

## Testing the effectiveness of the powder jet

1. **Point the handpiece at the test card and press the pedal.**
2. **Set the water flow on the handpiece connector.**
   - If there is not enough water: powder accumulates on the card.
   - If there is too much water: the polishing effect is less effective.
   - If the setting is correct: the powder is immediately removed by the water.
   - Where the powder jet is not powerful enough, clean the nozzle (see chapter "Cleaning the polishing system") or have the air pressure adjusted by an approved installer of dental equipment.

## Polishing

Proceed as follows:

1. **Use the *ProphyPen* polishing handpiece.**
2. **Press the pedal to start polishing. It is important to observe a jet/surface angle of from 45° to 60° and to keep to a spray/tooth distance of 4 to 6mm.**

## Purging the polishing circuit

1. **Release the pedal to stop polishing.**
2. **Point the *ProphyPen* handpiece towards the cuspidor.**
3. **Press the key (ref. 7) to purge the circuit.**

# 5. Maintenance

## Cleaning and disinfecting the device

The casing of the Air Max as well as the cords should be cleaned and disinfected every day, using alcohol or disinfectant dental wipes.

## Cleaning the polishing system

It is imperative that the powder circuit is purged before any cleaning takes place.

### The powder drum

Carefully empty the drum of powder if the device is not to be used for several hours (overnight for example). Residual dampness of the air alters the powder's properties.

To clean the powder drum, unscrew the reservoir cap and remove the residue using the dental chair's suction system.

### The ProphyPen handpiece

After each use, unscrew the ProphyPen handpiece nozzle (ref .20) and clean in an ultrasound tank for 10 minutes (fragments the powder), dry well and sterilize the nozzle and ProphyPen handpiece in an autoclave.

## Cleaning the filters

### The water filter

Cleaning the water filter must be done in relation to the hardness index of the water. Proceed as follows:

1. **Shut off the water at the tap on the water supply side and purge the circuit.**
2. **Set the on/off button to the "O" position and unplug the mains lead.**
3. **Unscrew the two parts of the filter (ref. 21 and 23) using two 10mm open-ended spanners.**
4. **Extract and replace the cartridge (ref. 22).**
5. **Reassemble by reversing the operation, retightening the two parts of the filter (ref. 21 and 23).**

### The air filter

When water is present, purge by turning the black screw (ref. 13) clockwise.

To stop the purge, turn the screw in the opposite direction.

## Replacing the fuses

Proceed as follows:

1. **Set the on/off button to the "O" (ref. 24) position and unplug the mains lead (ref. 25).**
2. **Insert the end of a screwdriver (ref. 26) in the slot to open the protective cover.**
3. **Replace the fuses (ref. 27) by fuses of the same type and value.**
4. **Push the fuse holder back into its housing.**

## 6. Troubleshooting

| Fault | Possible cause | Solution |
|---|---|---|
| Does not operate. (general) | Unplugged or defective mains cord. | Check and / or replace the mains cord. |
| | Fuses blown. | Replace the fuses. |
| | Defective wall power outlet. | Contact your electrician. |
| | Device switched off (0). | Set the switch to the on position (I). |
| | Foot control disconnected and / or defective. | Check and / or replace the foot control. |
| No powder, air or water. | No air or water coming from the pipes connected to the mains supply. | Contact your approved installer. |
| | Handpiece and / or nozzle blocked. | Disconnect the handpiece and check that air and powder are coming out of the cord:<br>- if not, return the device to Satelec After Sales Service;<br>- if they are, unscrew the handpiece nozzle, unblock the nozzle with a file and place the handpiece in an ultrasound tank for 10 minutes. |
| No powder or water but air present. | Powder: drum empty or too full. | Fill the drum or remove the excess. |
| | Water: water inlet not connected or incorrect water setting. | Check the water inlet pipe or adjust the water flow on the handpiece cord. |
| | Powder damp. | Empty and clean the drum and refill with new powder. |
| | Handpiece and / or nozzle blocked. | Disconnect the handpiece and check if water comes out of the cord:<br>If it doesn't, return the device to Satelec After Sales Service.<br>If it does, unscrew the handpiece nozzle, unblock the nozzle with a file and place the handpiece in an ultrasound tank for 10 minutes. |

# 7. Technical specifications

## Electrical

Class 1 type BF device

Intermittent duty 10 min / 5 min

Mains power supply (factory set):
- 110 to 150 V AC, 50/60 Hz
- 230 to 260 V AC, 50/60 Hz

Fuse protection: dimensions 5x20 mm, 0.5 A (230 V) or 1 A (115 V).

Power consumption: 70 VA

Insulation: 4kV (1 ms)

Manufactured in accordance with current legislation

Conforms to the general IEC 601-1 (= EN 60601-1) standard.

Retention of the memorized configuration: 10 years at +25°C

## Mechanical

Water pressure at inlet: 1 to 5 bar (14 to 72 PSI)

Air pressure at inlet: 4.5 to 6 bar (65 to 87 PSI)

## Operational

Air flow rate at inlet: 10 l/min max.

Water flow rate at exit: 0 to 120 ml/min

Rate of flow of powder: 1 to 3g/min

Specifications of the powder: white to slightly yellow powder, impalpable, slightly salty taste and mint or lemon flavor.

Powder drum capacity : 50g

## Dimensions and use

Overall dimensions:
- Width: 250mm
- Height : 110mm
- Depth: 300mm

Weight: 2.7kg

Fixing: mount on a table

Operating temperature: +10 to +40°C / 30 to 75% RH.

Storage/transport temperature: -40 to +70 °C / 10 to 100% RH.

## Symbols and markings

Alternating current

Type BF device

Warning, please refer to the accompanying documentation.

Marking:

CE 0459

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